

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2003/001825

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H03F 1/32

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H03F, H04L, H04K, H03B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003058959 A1 (MANOUCHEHR S. RAFIE ET AL), 27 March 2003 (27.03.2003), see page 4 paragraph 0048-0044; page 4 page 0056 - 0057; page 5; fig 4, 8	1,7,13,19
Y	--	2,8,14,20
X	US 5923712 A (ROBERT RICHARD LEYENDECKER ET AL), 13 July 1999 (13.07.1999), column 2, line 59 - column 3, line 50, figures 4,5,6,7	1,7,13,19
Y	--	2,8,14,20
Y	GB 2385730 A (MOTOROLA INC), 27 August 2003 (27.08.2003), page 3, line 24 - page 8, line 2	2,8,14,20
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☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

11 June 2004

Date of mailing of the international search report

22-06-2004

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5914620 A (BRENT S. SIMONS ET AL), 22 June 1999 (22.06.1999), column 2, line 51 - column 5, line 53  --	2,8,14,20
A	US 6108385 A (WILLIAM SPENCER WORLEY, III), 22 August 2000 (22.08.2000), see whole document  -- -----	1-24

# INTERNATIONAL SEARCH REPORT

Information on patent family members

30/04/2004

International application No.

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US	2003058959	A1	27/03/2003	NONE		
US	5923712	A	13/07/1999	AU	7264898 A	27/11/1998
				CA	2289208 A	12/11/1998
				EP	0980613 A	23/02/2000
				US	6141390 A	31/10/2000
				WO	9851047 A	12/11/1998
GB	2385730	A	27/08/2003	GB	0204047 D	00/00/0000
US	5914620	A	22/06/1999	AU	6885098 A	30/10/1998
				WO	9845936 A	15/10/1998
US	6108385	A	22/08/2000	AU	3595097 A	02/02/1998
				CA	2259161 A	15/01/1998
				EP	0910894 A	28/04/1999
				JP	2001505721 T	24/04/2001
				KR	2000023657 A	25/04/2000
				WO	9801945 A	15/01/1998